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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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BRIARCLIFF MANOR, NY 10510		ART UNIT	PAPER NUMBER	

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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)		
Office A 41'- 11 October 111	09/804,003	WEISHUT ET AL.		
Office Action Summary	Examiner	Art Unit		
	Harun M. Yimam	2623		
<ul> <li>The MAILING DATE of this communication app</li> <li>Period for Reply</li> </ul>	ears on the cover sheet with the c	orrespondence address -		
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).		
Status	•			
1) Responsive to communication(s) filed on 12/29	)/2005.	:		
• • • • • • • • • • • • • • • • • • • •	action is non-final.			
3) Since this application is in condition for allowar		esecution as to the merits is		
closed in accordance with the practice under E	·	•		
Diamonition of Claims		•		
Disposition of Claims		÷		
4)⊠ Claim(s) <u>1-20</u> is/are pending in the application.				
4a) Of the above claim(s) is/are withdray	vn from consideration.	1 .		
5) Claim(s) is/are allowed.				
6) Claim(s) 1-20 is/are rejected.				
7) Claim(s) is/are objected to.				
8) Claim(s) are subject to restriction and/or	r election requirement.	:		
Application Papers				
9)☐ The specification is objected to by the Examine	r.	: :		
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correct	ion is required if the drawing(s) is obj	jected to. See 37 CFR 1.121(d).		
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.		
Priority under 35 U.S.C. § 119		; ;		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:	priority under 35 U.S.C. § 119(a)	)-(d) or (f).		
1. Certified copies of the priority documents		:		
2. Certified copies of the priority documents	• •	<u> </u>		
3. Copies of the certified copies of the prior	<u> </u>	ed in this National Stage		
application from the International Bureau	, , , ,			
* See the attached detailed Office action for a list	of the certified copies not receive	ed.		
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		:		
Attachment(s)		•		
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ate Patent Application (PTO-152)		
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	6) Other:	atom Application (FTO-132)		

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#### Note to Applicant

Art Units 2611, 2614 and 2617 have changed to 2623. Please make all future correspondence indicate the new designation 2623.

### **DETAILED ACTION**

#### Response to Arguments

- 1. Applicant's arguments filed 04/07/2006 have been fully considered but are moot in view of new grounds of rejection.
- 2. In response to applicants' argument (page 14, 1st paragraph) that the 'one thumbs up' of the "All Category" shown in FIG. 5 of Ali is NOT computed by the system, as it does not have the shape of predicted ratings 72 shown in FIG. 7, First of all, applicants should note that Ali explicitly discloses that icons for user ratings and icons for predicted ratings are separate, similar, but distinct. Secondly, Ali further discloses that the "user's preferences, expressed as ratings, are necessary as input to the various predictive algorithms of the invention" (paragraph 0031, lines 33-35). Furthermore, Ali discloses "the user teaches the system his or her preferences by assigning overall ratings to programs they are familiar with, and rating individual program elements, such as actors and genres. Subsequently, the preferences are fed to one or more predictive algorithms to assign ratings to programs that predict the likelihood of the user liking them." (paragraph 0036, lines 1-7). Therefore, the 'one thumbs up' of the "All Category" shown in FIG. 5 of Ali is the user assigned ratings used by the

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predictive algorithms (the system - the user profile module) to assign ratings to programs (*to compute ratings*).

3. In response to applicants' argument (page 14, 2<sup>nd</sup> paragraph) that "computing by a user profile module a rating of a category of the first level as a function of ratings of subordinate categories of the second level" is nowhere taught or suggested by Sciammarella or Ali, please refer to the response above and all of page 4 in Ali.

## Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 1, 2, 6-8, 12-15, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sciammarella et al (USPN 6,608,633), previously cited by examiner, in view of Ali (USP 2002/0199194), previously cited by examiner.

Regarding claim 1, the claimed "method of rating database objects" is met as follows:

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- The claimed step of "categorizing the objects into a plurality of categories" is met by the discussion of programs being organized and displayed within the GUI according to categories [col. 5, lines 8-13].
- The claimed step of "rating at least one of the said categories" is met by the measuring value used to compute the relative importance of various categories [col. 5, lines 8-20].
- The claimed step of "arranging the categories in accordance with a multi-level category scheme with a first level of categories and a second level of categories subordinate to a respective category of the first level" is met by the fact that the categories can be further sub-divided into sub-categories, which can also be ranked according to the aforementioned measuring value [col. 6, lines 53-65].
- The claimed step of "computing by a user profile module a rating of a category of the first level as a function of ratings of subordinate categories of the second level" is not met explicitly by the Sciammarella reference.

  The Ali reference, however, discloses a system for ranking programs and categories similar to that of Sciammarella. Figure 5 shows a 'teach subcategory' screen 50, which is used to rank sub-categories according to user preferences and 'thumbs up/down' ratings. Paragraph 31 teaches that screen 50 can be used to allow the user to assign 'thumbs' ratings to the selected categories, although the display is not immediately redrawn to reflect the user's ratings.

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Ali further discloses that the "user's preferences, expressed as ratings, are necessary as input to the various predictive algorithms of the invention" (paragraph 0031, lines 33-35). Furthermore, Ali discloses "the user teaches the system his or her preferences by assigning overall ratings to programs they are familiar with, and rating individual program elements, such as actors and genres. Subsequently, the preferences are fed to one or more predictive algorithms to assign ratings to programs that predict the likelihood of the user liking them." (paragraph 0036, lines 1-7). Therefore, the predictive algorithm that that predicts the likelihood of the user liking a certain programs by <u>computing</u> the user's preferences to assign ratings to programs is the user profile module.

The Examiner also notes that it is inherent to the system overall and more directly to screen 50 that the rating of the category is computed based on the ratings of the sub-categories. Screen 50 shows that the entire category has a rating of +1, which is the average of the ratings of all of the sub-categories 2-10 (the average being 5/9, which, when represented by a whole number, is rounded to 1). The Examiner further notes that the system uses collaborative filtering, discussed in paragraph 39.

Collaborative Filtering uses weighted averages in order to suggest programming and rounds to the nearest whole number to represent the weighted average as a 'thumbs' value. This weighted average functionality and the inherent average of the 'thumbs' ratings found in screen 50 indicate that a function (the average function) is used to compute the rating for the category based on the ratings of the sub-categories. The Sciammarella reference even goes as far as to suggest that the user may select a

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program rating through manipulation of the GUI [Sciammarella, col. 5, lines 15-20]. It would have been clearly obvious to one of ordinary skill in the art at the time of the invention to rate sub-categories and use these ratings to compute ratings of categories, in order to predict ratings for items of media content according to how likely they are to appeal to a user based on the user's own earlier ratings.

Regarding claim 2, the claimed "method as defined in claim 1, wherein the rating of the category of the first level is computed as the average of the ratings of subordinate categories of the second level" is met by the same discussion as above in claim 1. The function discussed with reference to claim 1 is the average function. See the above rejection to the fourth bullet point of claim 1 for further discussion.

Regarding claim 6, the claimed "method as defined in claim 1, characterized in that the objects are programs in an electronic program guide (EPG) database, and the categories of the first and second level are genres and sub-genres of said programs, respectively" is met by the discussion of the EPG data which is sent in the data stream from the head end [col. 7, line 62 – col. 8, line 4]. The GUI discussed throughout the reference makes use of the EPG data (including genre and sub-genre of each program) that is stored in data buffer 11.

Regarding claim 7, see the above rejection of claim 1.

Regarding claim 8, see the above rejection of claim 2.

Regarding claim 12, see the above rejection to claim 6.

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Regarding claim 13, the claimed "computer program product for performing, when executed on a programmable computing device, the steps of the method as defined in claim 1" is met by the same discussion as set forth in claim 1. The fact that a computer program product can execute the steps of claim 1 is met in column 5, lines 21-25, wherein a computer program for accomplishing the aforementioned steps is disclosed.

Regarding claim 14, see the above rejection to claim 1.

Regarding claim 15, see the above rejection to claim 2.

Regarding claim 19, the claimed "apparatus as recited in claim 14, further comprising memory adapted to store user profile information" is met by EEPROM 38, for storing user settings and preferences [col. 8, lines 40-43].

6. Claims 3-5, 9-11, and 16-18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sciammarella et al (USPN 6,608,633), previously cited by examiner, in view of Ali (USP 2002/0199194), previously cited by examiner, and in further view of Lemmons (USPN 6,481,011), previously cited by examiner.

Regarding claim 3, the Sciammarella and Ali references teach all of that which is discussed above with regards to claim 1. Neither the Sciammarella nor Ali reference teach the claimed "method as defined in claim 1, wherein the method further comprises a step of visually representing a rating by means of a color". The Lemmons reference

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teaches the use of colors to distinguish between liked and disliked programs [col. 6, lines 13-21] and between sub-genres [col. 6, lines 57-67]. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the use of colors into the rating system, in order to more accurately highlight programs and genres that a user likes [col. 1, lines 56-59].

Regarding claim 4, the Sciammarella, Ali, and Lemmons references teach all of that which is discussed above with regards to claim 3. Neither the Sciammarella nor Ali reference teach the claimed "method as defined in claim 3, wherein a plurality of ratings is represented by means of a single color, a parameter of said color corresponding to a respective one of said plurality of ratings". The Lemmons reference discloses the ability for the user to assign a color to a rating in order to fit personal preferences [col. 6, lines 13-21]. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the use of colors into the rating system, in order to more accurately highlight programs and genres that a user likes [col. 1, lines 56-59].

Regarding claim 5, the Sciammarella, Ali, and Lemmons references teach all of that which is discussed above with regards to claim 4. Neither the Sciammarella nor Ali reference teach the claimed "method as defined in claim 4, wherein said parameter is the saturation of said color". The Lemmons reference does disclose a way to distinguish between different colors and ratings by varying intensity of color through the use of backgrounds and patterns [col. 7, lines 49-53]. It would have been obvious to

one of ordinary skill in the art at the time of the invention to incorporate the use of varying colors into the rating system, in order to more accurately highlight programs and genres that a user likes [col. 1, lines 56-59].

Regarding claim 9, see the above rejection of claim 3.

Regarding claim 10, see the above rejection of claim 4.

Regarding claim 11, see the above rejection of claim 5.

Regarding claim 16, see the above rejection of claim 3.

Regarding claim 17, the claimed "apparatus as recited in claim 16, wherein the first and the second levels of categories are displayed on the display screen" is met by screen 50 of Figure 5 of the Ali reference, as previously discussed in claim 14. Screen 50 displays "All Category" and sub-categories 2-10 on the display screen.

Regarding claim 18, the claimed "apparatus as recited in claim 17, wherein the display screen is adapted to display a connection indicator, which connects a category of one of the first level of categories to one of the second level of categories" is met, again, by screen 50 of Figure 5 of the Ali reference, as previously discussed in claim 14. Screen 50 displays "All Category" and sub-categories 2-10 together on the display screen, with the ability for the user to actuate the GUI and move seamlessly between the category and the sub-categories.

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Regarding claim 20, the claimed "apparatus as recited in claim 16, further comprising an electronic program guide (EPG) module adapted to display programs on a screen, wherein the ratings of the plurality of second categories are included in the displayed programs" is met by Figure 2 of the Ali reference, which shows a list of suggested programs accompanied by their rating icons [paragraph 31]. These 'thumbs' indicate favorability ratings based on category ratings, actor ratings, or other such predicted ratings.

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Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Harun M. Yimam whose telephone number is 571-272-

7260. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Chris Grant can be reached on 571-272-7294. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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**HMY** 

CHRISTOPHER GRANT PERVISORY PATENT EXAMINER

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